INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT

PATENT COOPERATION TREATY

(Chapter II of the Patent Cooperation Treaty)

Applicant's or agent's file reference RL 605 WO	**FOR FURTHER ACTION**	See Form PCT/IPEA/416
International application No. PCT/EP2004/013921	International filing date *(day/month/year)* 08/12/2004	Priority date *(day/month/year)* 17/12/2003
International Patent Classification (IPC) or national classification and IPC F16B37/04		
Applicant A. RAYMOND & CIE et al.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
   a. ☒ *(sent to the applicant and to the International Bureau)* a total of ___3___ sheets, as follows:
      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
      ☐ sheets that supersede earlier sheets, but which this Authority considers to contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
08/07/2005	14/02/2006
Name and mailing address of the International examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399-0 Telex: 523656 epmu d Fax: +49 89 2399-4465	Authorized officer Heinzler, M. Tel. +49 89 2399-7153

Form PCT/IPEA/409 (cover sheet) (January 2004)

Box No. I. Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise stated in this section.

   ☐ The report is based on a translation from the original language into the following language, , which is the language of the translation furnished for the purposes of:

   ☐ international search (under Rules 12.3(a) and 23.1(b))
   ☐ publication of the international application (under Rule 12.4(a))
   ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets that have been furnished to the receiving office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed hereto)*:

   Description, pages

   1-6 as originally filed

   Claims, No.

   3 (part), 4-6 received July 8, 2005, with letter dated July 7, 2005
   1, 2, 3 (part) received January 18, 2006, with letter dated January 17, 2006

   Drawings, Sheets

   1/3-3/3 as originally filed

   ☐ a sequence listing and/or any related tables – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:
   ☐ description, pages
   ☐ claims: Nos.
   ☐ drawings: sheet/fig.
   ☐ sequence listing *(specify)*:
   ☐ any tables related to the sequence listing *(specify)*:

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since in the opinion of the authority they go beyond the disclosure as filed, for the reasons stated in the Supplemental Box (Rule 70.2 c)).*
   ☐ description, pages
   ☐ claims: Nos.
   ☐ drawings: sheet/Fig.
   ☐ sequence listing *(specify)*:
   ☐ any tables related to the sequence listing *(specify)*:

**If Item 4 applies, some or all of those sheets may be marked "superseded."*

Box No. V. Reasoned statement under Article 35(2) as to novelty, inventive step and industrial applicability; citations and explanations in support of said statement

1. Statement

Novelty (N)	Yes:	Claims 1-6
	No:	Claims
Inventive step (S)	Yes:	Claims 1-6
	No:	Claims
Industrial applicability (IA)	Yes:	Claims 1-6
	No:	Claims

2. Citations and explanations (Rule 70.7):

See supplemental sheet

Re Item V

Reasoned statement under Article 35(2) as to novelty, inventive step and industrial applicability; citations and explanations in support of said statement

1. Document D1 (EP-A-9 950 821) is considered to be the closest prior art with respect to the subject matter of **Claim 1**. It discloses (see col. 4, para. 15 to p. 5, para. 21; Figs. 1-4):
   - A device with a plug-in element ("exterior part or head 14") that can be inserted in a recess of a support element and is provided with two laterally projecting bearing sections
   - with an inner element ("interior part or head 12") that has a threaded region ("hole 31") configured with a thread structure ("threads 32") and counter-elements ("parallel end edges of the plate 30"; see col. 4, lines 38 et seq.) disposed opposite each bearing section, the inner element being received in the plug-in element so as to be axially displaceable,
   - said inner element comprising, as a central element, a face plate in the center of which the threaded region with the thread structure is configured (see col. 4, lines 31 et seq.; Fig. 4; "central plate 30 with an extruded central hole 31 having internal rolled threads"),
   - and said face plate being adjoined by two edge webs of the inner element ("flanges 38 and 39") that are oriented substantially parallel to each other and on which the counter-elements ("pintles 45 and 46") are configured.

   The subject matter of Claim 1 differs from this in that the plug-in element is provided with an abutment region that comes into engagement with a screw screwed into the threaded region and forms a stop for the screw, so that when the screw is tightened in the thread structure the inner element moves against the direction of insertion of the screw until the or each counter-element bears against that side of the edge region of the recess receiving the plug-in element that is disposed opposite the or each bearing section.

2. The subject matter of Claim 1 is therefore novel (Article 33(2) PCT).

3. The object to be achieved by the present invention can be considered to be to specify a device by means of which an add-on piece can be connected to a support element at a distance therefrom.

   The solution proposed for this object in Claim 1 of the present application – namely, unscrewing the inner element from the plug-in element – cannot be inferred from D1, since there the two parts are moved toward each either as they are screwed together.

   Nor do the other documents cited in the search report provide any suggestion of the solution claimed in the present case.

   The subject matter of Claim 1 is therefore based on an inventive step (Article 33(3) PCT).

4. **Claims 2-6** depend from Claim 1 and therefore also satisfy the requirements of the PCT with regard to novelty and inventive step.

PATENT CLAIMS

1. A device for connecting a support element (27) to an add-on piece (26), comprising a plug-in element (1) that can be inserted in a recess of said support element (27) and includes at least one laterally projecting bearing section (6, 7), comprising an inner element (12) having a threaded region (14), configured at least sectionally with a thread structure, and at least one counter-element (22, 23) that confronts the or each bearing section (6, 7), said inner element (12) being received in the plug-in element (1) so as to be axially displaceable, said inner element (12) having as a central element a face plate (13) in the center of which said threaded region (14) with said thread structure (15) is configured, and said face plate (13) being adjoined by two edge webs (16, 17) of said inner element (12) that are oriented substantially parallel to each other and on which said counter-elements (22, 23) are configured, **characterized in that** said plug-in element (1) is provided with an abutment region (3) that comes into engagement with a screw (31) screwed into said threaded region (14) and forms a stop for said screw (31), so that when said screw (31) is rotated into said thread structure (15), said inner element (12) moves against the direction of insertion of the screw (31) until the or each counter-element (22, 23) bears against that face of the edge region of the recess receiving said plug-in element (1) that confronts the or each bearing section (6, 7).

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2. The device as recited in claim 1, characterized in that said edge webs (16, 17) are adjoined by respective inner tongues (18, 19) of said inner element (12) that are oriented toward each other and extend to said abutment region (3).

3. The device as recited in claim 1 or claim 2, characterized in that said plug-in element (1) is formed from a pre-punched sheet metal strip and comprises a central web (2) and two edge webs (4, 5) adjoining said central web (2)

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adjoining said central web (2) [repetition sic] edgewise and oriented substantially parallel to each other, to which said bearing sections (6, 7) are joined.

4. The device as recited in claim 3, characterized in that said edge webs (4, 5) of said plug-in element (1) are configured with respective stop lugs (8, 9) oriented such that they point toward each other and slant in the direction of said central web (2).

5. The device as recited in claim 3 or claim 4, characterized in that said edge webs (4, 5) of said plug-in element (1) comprise edge recesses (10, 11) oriented in the longitudinal direction.

6. The device as recited in one of claims 1 to 5, characterized in that said inner element (12) is formed from a pre-punched sheet metal strip.

AMENDED SHEET JULY 8, 2005